

Recombinant Human DNMT2 / TRDMT1 Protein (GST tag)

Cat.NO.: TP06658

3th Edition

Synonyms:DMNT2;DNMT2;MHSAIIP;PUMET;RNMT1

Description:DNMT2, also known as tRNA (cytosine-5-)-methyltransferase, DNA methyltransferase homolog HsallP, and TRDMT1, is a member of the DNA methyltransferase family of enzymes. DNMT2 enzymes have been widely conserved during evolution and contain all of the signature motifs of DNA (cytosine-5)-methyltransferases. It contains all 10 sequence motifs that are conserved among m(5)C MTases, including the consensus S:-adenosyl-L-methionine-binding motifs and the active site ProCys dipeptide, and its structure is very similar to prokaryotic DNA methyltransferases. DNMT2 has close homologs in plants, insects and *Schizosaccharomyces pombe*, but no related sequence can be found in the genomes of *Saccharomyces cerevisiae* or *Caenorhabditis elegans*. While the biological function of DNMT2 is not yet known, the strong binding to DNA suggests that DNMT2 may mark specific sequences in the genome by binding to DNA through the specific target-recognizing motif. However, the DNA methyltransferase activity of these proteins is comparatively weak and their biochemical and functional properties remain enigmatic. Recent evidence now shows that Dnmt2 has a novel tRNA methyltransferase activity, raising the possibility that the biological roles of these proteins might be broader than previously thought.

Form:PBS

Molecular Weight:71 kDa

Sequences:Met 1-Glu 391

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.